



RUJ-001CNCPRCE2

SEQUENCE LISTING

<110> Hawiger, Daniel  
Steinman, Ralph M.  
Nussenzweig, Michel C.

<120> Enhanced Antigen Delivery and Modulation  
of the Immune Response Therefrom

<130> RUJ-001CNCPRCE2

<140> 09/925,284  
<141> 2001-08-09

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<151> 2000-06-05

<150> 08/381,528  
<151> 1995-01-31

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tgtgctacc 69

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<212> PRT  
<213> Homo sapiens

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Arg His Arg Leu His Leu Ala Gly Phe Ser Ser Val Arg Tyr Ala Gln  
1 5 10 15  
Gly Val Asn Glu Asp Glu Ile Met Leu Pro Ser Phe His Asp  
20 25 30

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Gly Lys Cys Ile Gln Pro Leu Phe Asp  
20 25

<210> 9

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; mus musculus

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Ser	Glu	Ser	Ser	Gly	Asn	Asp	Pro	Phe	Thr	Ile	Val	His	Glu	Asn	Thr
1				5					10				15		
Gly	Lys	Cys													

&lt;210&gt; 10

&lt;211&gt; 1723

&lt;212&gt; PRT

&lt;213&gt; mus musculus

&lt;220&gt;

&lt;223&gt; predicted DEC-205

&lt;400&gt; 10

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1				5					10			15			
Leu	Leu	Leu	Arg	Ser	Phe	Gly	Leu	Val	Glu	Pro	Ser	Glu	Ser	Ser	Gly
									25			30			
Asn	Asp	Pro	Phe	Thr	Ile	Val	His	Glu	Asn	Thr	Gly	Lys	Cys	Ile	Gln
									40			45			
Pro	Leu	Ser	Asp	Trp	Val	Val	Ala	Gln	Asp	Cys	Ser	Gly	Thr	Asn	Asn
													50		
									55			60			
Met	Leu	Trp	Lys	Trp	Val	Ser	Gln	His	Arg	Leu	Phe	His	Leu	Glu	Ser
													65		
									70			75			80
Gln	Lys	Cys	Leu	Gly	Leu	Asp	Ile	Thr	Lys	Ala	Thr	Asp	Asn	Leu	Arg
									85			90			95
Met	Phe	Ser	Cys	Asp	Ser	Thr	Val	Met	Leu	Trp	Trp	Lys	Cys	Glu	His
									100			105			110
His	Ser	Leu	Tyr	Thr	Ala	Ala	Gln	Tyr	Arg	Leu	Ala	Leu	Lys	Asp	Gly
									115			120			125
Tyr	Ala	Val	Ala	Asn	Thr	Asn	Thr	Ser	Asp	Val	Trp	Lys	Lys	Gly	Gly
									130			135			140
Ser	Glu	Glu	Asn	Leu	Cys	Ala	Gln	Pro	Tyr	His	Glu	Ile	Tyr	Thr	Arg
									145			150			160
Asp	Gly	Asn	Ser	Tyr	Gly	Arg	Pro	Cys	Glu	Phe	Pro	Phe	Leu	Ile	Gly
									165			170			175
Glu	Thr	Trp	Tyr	His	Asp	Cys	Ile	His	Asp	Glu	Asp	His	Ser	Gly	Pro
									180			185			190
Trp	Cys	Ala	Thr	Thr	Leu	Ser	Tyr	Glu	Tyr	Asp	Gln	Lys	Trp	Gly	Ile
									195			200			205
Cys	Leu	Leu	Pro	Glu	Ser	Gly	Cys	Glu	Gly	Asn	Trp	Glu	Lys	Asn	Glu
									210			215			220
Gln	Ile	Gly	Ser	Cys	Tyr	Gln	Phe	Asn	Asn	Gln	Glu	Ile	Leu	Ser	Trp
									225			230			240
Lys	Glu	Ala	Tyr	Val	Ser	Cys	Gln	Asn	Gln	Gly	Ala	Asp	Leu	Leu	Ser
									245			250			255
Ile	His	Ser	Ala	Glu	Leu	Ala	Tyr	Ile	Thr	Gly	Lys	Glu	Asp	Ile	
									260			265			270
Ala	Arg	Leu	Val	Trp	Leu	Gly	Leu	Asn	Gln	Leu	Tyr	Ser	Ala	Arg	Gly
									275			280			285
Trp	Glu	Trp	Ser	Asp	Phe	Arg	Pro	Leu	Lys	Phe	Leu	Asn	Trp	Asp	Pro
									290			295			300
Gly	Thr	Pro	Val	Ala	Pro	Val	Ile	Gly	Gly	Ser	Ser	Cys	Ala	Arg	Met
									305			310			315
Asp	Thr	Glu	Ser	Gly	Leu	Trp	Gln	Ser	Val	Ser	Cys	Glu	Ser	Gln	Gln

325	330	335
Pro Tyr Val Cys Lys Lys Pro Leu Asn Asn Thr Leu Glu	Leu Pro Asp	
340	345	350
Val Trp Thr Tyr Thr Asp Thr His Cys His Val Gly Trp	Leu Pro Asn	
355	360	365
Asn Gly Phe Cys Tyr Leu Leu Ala Asn Glu Ser Ser Ser	Trp Asp Ala	
370	375	380
Ala His Leu Lys Cys Lys Ala Phe Gly Ala Asp Leu Ile	Ser Met His	
385	390	400
Ser Leu Ala Asp Val Glu Val Val Val Thr Lys Leu His	Asn Gly Asp	
405	410	415
Val Lys Lys Glu Ile Trp Thr Gly Leu Lys Asn Thr Asn	Ser Pro Ala	
420	425	430
Leu Phe Gln Trp Ser Asp Gly Thr Glu Val Thr Leu Thr	Tyr Trp Asn	
435	440	445
Glu Asn Glu Pro Ser Val Pro Phe Asn Lys Thr Pro Asn	Cys Val Ser	
450	455	460
Tyr Leu Gly Lys Leu Gly Gln Trp Lys Val Gln Ser Cys	Glu Lys Lys	
465	470	475
Leu Arg Tyr Val Cys Lys Lys Gly Glu Ile Thr Lys Asp	Ala Glu	
485	490	495
Ser Asp Lys Leu Cys Pro Pro Asp Glu Gly Trp Lys Arg	His Gly Glu	
500	505	510
Thr Cys Tyr Lys Ile Tyr Glu Lys Glu Ala Pro Phe	Gly Thr Asn Cys	
515	520	525
Asn Leu Thr Ile Thr Ser Arg Phe Glu Gln Glu Phe	Leu Asn Tyr Met	
530	535	540
Met Lys Asn Tyr Asp Lys Ser Leu Arg Lys Tyr Phe Trp	Thr Gly Leu	
545	550	555
Arg Asp Pro Asp Ser Arg Gly Glu Tyr Ser Trp Ala Val	Ala Gln Gly	
565	570	575
Val Lys Gln Ala Val Thr Phe Ser Asn Trp Asn Phe	Leu Pro Ala	
580	585	590
Ser Pro Gly Gly Cys Val Ala Met Ser Thr Gly Lys	Thr Leu Gly Lys	
595	600	605
Trp Glu Val Lys Asn Cys Arg Ser Phe Arg Ala Leu	Ser Ile Cys Lys	
610	615	620
Lys Val Ser Glu Pro Gln Glu Pro Glu Ala Ala Pro	Lys Pro Asp	
625	630	635
Asp Pro Cys Pro Glu Gly Trp His Thr Phe Pro Ser	Ser Leu Ser Cys	
645	650	655
Tyr Lys Val Phe His Ile Glu Arg Ile Val Arg Lys Arg	Asn Trp Glu	
660	665	670
Glu Ala Glu Arg Phe Cys Gln Ala Leu Gly Ala His	Leu Pro Ser Phe	
675	680	685
Ser Arg Arg Glu Glu Ile Lys Asp Phe Val His Leu	Leu Lys Asp Gln	
690	695	700
Phe Ser Gly Gln Arg Trp Leu Trp Ile Gly Leu Asn	Lys Arg Ser Pro	
705	710	715
Asp Leu Gln Gly Ser Trp Gln Trp Ser Asp Arg Thr	Pro Val Ser Ala	
725	730	735
Val Met Met Glu Pro Glu Phe Gln Gln Asp Phe Asp	Ile Arg Asp Cys	
740	745	750
Ala Ala Ile Lys Val Leu Asp Val Pro Trp Arg Arg	Val Trp His Leu	
755	760	765
Tyr Glu Asp Lys Asp Tyr Ala Tyr Trp Lys Pro Phe	Ala Cys Asp Ala	
770	775	780
Lys Leu Glu Trp Val Cys Gln Ile Pro Lys Gly Ser	Thr Pro Gln Met	
785	790	795
Pro Asp Trp Tyr Asn Pro Glu Arg Thr Gly Ile His	Gly Pro Pro Val	
805	810	815
Ile Ile Glu Gly Ser Glu Tyr Trp Phe Val Ala Asp	Pro His Leu Asn	
820	825	830

Tyr Glu Glu Ala Val Leu Tyr Cys Ala Ser Asn His Ser Phe Leu Ala  
 835 840 845  
 Thr Ile Thr Ser Phe Thr Gly Leu Lys Ala Ile Lys Asn Lys Leu Ala  
 850 855 860  
 Asn Ile Ser Gly Glu Glu Gln Lys Trp Trp Val Lys Thr Ser Glu Asn  
 865 870 875 880  
 Pro Ile Asp Arg Tyr Phe Leu Gly Ser Arg Arg Arg Leu Trp His His  
 885 890 895  
 Phe Pro Met Thr Phe Gly Asp Glu Cys Leu His Met Ser Ala Lys Thr  
 900 905 910  
 Trp Leu Val Asp Leu Ser Lys Arg Ala Asp Cys Asn Ala Lys Leu Pro  
 915 920 925  
 Phe Ile Cys Glu Arg Tyr Asn Val Ser Ser Leu Glu Lys Tyr Ser Pro  
 930 935 940  
 Asp Pro Ala Ala Lys Val Gln Cys Thr Glu Lys Trp Ile Pro Phe Gln  
 945 950 955 960  
 Asn Lys Cys Phe Leu Lys Val Asn Ser Gly Pro Val Thr Phe Ser Gln  
 965 970 975  
 Ala Ser Gly Ile Cys His Ser Tyr Gly Gly Thr Leu Pro Ser Val Leu  
 980 985 990  
 Ser Arg Gly Glu Gln Asp Phe Ile Ile Ser Leu Leu Pro Glu Met Glu  
 995 1000 1005  
 Ala Ser Leu Trp Ile Gly Leu Arg Trp Thr Ala Tyr Glu Arg Ile Asn  
 1010 1015 1020  
 Arg Trp Thr Asp Asn Arg Glu Leu Thr Tyr Ser Asn Phe His Pro Leu  
 1025 1030 1035 1040  
 Leu Val Gly Arg Arg Leu Ser Ile Pro Thr Asn Phe Phe Asp Asp Glu  
 1045 1050 1055  
 Ser His Phe His Cys Ala Leu Ile Leu Asn Leu Lys Lys Ser Pro Leu  
 1060 1065 1070  
 Thr Gly Thr Trp Asn Phe Thr Ser Cys Ser Glu Arg His Ser Leu Ser  
 1075 1080 1085  
 Leu Cys Gln Lys Tyr Ser Glu Thr Glu Asp Gly Gln Pro Trp Glu Asn  
 1090 1095 1100  
 Thr Ser Lys Thr Val Lys Tyr Leu Asn Asn Leu Tyr Lys Ile Ile Ser  
 1105 1110 1115 1120  
 Lys Pro Leu Thr Trp His Gly Ala Leu Lys Glu Cys Met Lys Glu Lys  
 1125 1130 1135  
 Met Arg Leu Val Ser Ile Thr Asp Pro Tyr Gln Gln Ala Phe Leu Ala  
 1140 1145 1150  
 Val Gln Ala Thr Leu Arg Asn Ser Ser Phe Trp Ile Gly Leu Ser Ser  
 1155 1160 1165  
 Gln Asp Asp Glu Leu Asn Phe Gly Trp Ser Asp Gly Lys Arg Leu Gln  
 1170 1175 1180  
 Phe Ser Asn Trp Ala Gly Ser Asn Glu Gln Leu Asp Asp Cys Val Ile  
 1185 1190 1195 1200  
 Leu Asp Thr Asp Gly Phe Trp Lys Thr Ala Asp Cys Asp Asp Asn Gln  
 1205 1210 1215  
 Pro Gly Ala Ile Cys Tyr Tyr Pro Gly Asn Glu Thr Glu Glu Val  
 1220 1225 1230  
 Arg Ala Leu Asp Thr Ala Lys Cys Pro Ser Pro Val Gln Ser Thr Pro  
 1235 1240 1245  
 Trp Ile Pro Phe Gln Asn Ser Cys Tyr Asn Phe Met Ile Thr Asn Asn  
 1250 1255 1260  
 Arg His Lys Thr Val Thr Pro Glu Glu Val Gln Ser Thr Cys Glu Lys  
 1265 1270 1275 1280  
 Leu His Pro Lys Ala His Ser Leu Ser Ile Arg Asn Glu Glu Glu Asn  
 1285 1290 1295  
 Thr Phe Val Val Glu Gln Leu Leu Tyr Phe Asn Tyr Ile Ala Ser Trp  
 1300 1305 1310  
 Val Met Leu Gly Ile Thr Tyr Glu Asn Asn Ser Leu Met Trp Phe Asp  
 1315 1320 1325  
 Lys Thr Ala Leu Ser Tyr Thr His Trp Arg Thr Gly Arg Pro Thr Val

1330	1335	1340
Lys Asn Gly Lys Phe Leu Ala Gly Leu Ser Thr Asp Gly Phe Trp Asp		
1345	1350	1355
Ile Gln Ser Phe Asn Val Ile Glu Glu Thr Leu His Phe Tyr Gln His		1360
1365	1370	1375
Ser Ile Ser Ala Cys Lys Ile Glu Met Val Asp Tyr Glu Asp Lys His		
1380	1385	1390
Asn Gly Thr Leu Pro Gln Phe Ile Pro Tyr Lys Asp Gly Val Tyr Ser		
1395	1400	1405
Val Ile Gln Lys Lys Val Thr Trp Tyr Glu Ala Leu Asn Ala Cys Ser		
1410	1415	1420
Gln Ser Gly Gly Glu Leu Ala Ser Val His Asn Pro Asn Gly Lys Leu		
1425	1430	1435
Phe Leu Glu Asp Ile Val Asn Arg Asp Gly Phe Pro Leu Trp Val Gly		1440
1445	1450	1455
Leu Ser Ser His Asp Gly Ser Glu Ser Phe Glu Trp Ser Asp Gly		
1460	1465	1470
Arg Ala Phe Asp Tyr Val Pro Trp Gln Ser Leu Gln Ser Pro Gly Asp		
1475	1480	1485
Cys Val Val Leu Tyr Pro Lys Gly Ile Trp Arg Arg Glu Lys Cys Leu		
1490	1495	1500
Ser Val Lys Asp Gly Ala Ile Cys Tyr Lys Pro Thr Lys Asp Lys Lys		
1505	1510	1515
Leu Ile Phe His Val Lys Ser Ser Lys Cys Pro Val Ala Lys Arg Asp		1520
1525	1530	1535
Gly Pro Gln Trp Val Gln Tyr Gly His Cys Tyr Ala Ser Asp Gln		
1540	1545	1550
Val Leu His Ser Phe Ser Glu Ala Lys Gln Val Cys Gln Glu Leu Asp		
1555	1560	1565
His Ser Ala Thr Val Val Thr Ile Ala Asp Glu Asn Glu Asn Lys Phe		
1570	1575	1580
Val Ser Arg Leu Met Arg Glu Asn Tyr Asn Ile Thr Met Arg Val Trp		
1585	1590	1595
Leu Gly Leu Ser Gln His Ser Leu Asp Gln Ser Trp Ser Trp Leu Asp		1600
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Gly Leu Asp Val Thr Phe Val Lys Trp Glu Asn Lys Thr Lys Asp Gly		
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Asp Gly Lys Cys Ser Ile Leu Ile Ala Ser Asn Glu Thr Trp Arg Lys		
1635	1640	1645
Val His Cys Ser Arg Gly Tyr Ala Arg Ala Val Cys Lys Ile Pro Leu		
1650	1655	1660
Ser Pro Asp Tyr Thr Gly Ile Ala Ile Leu Phe Ala Val Leu Cys Leu		
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Leu Gly Leu Ile Ser Leu Ala Ile Trp Phe Leu Leu Gln Arg Ser His		1680
1685	1690	1695
Ile Arg Trp Thr Gly Phe Ser Ser Val Arg Tyr Glu His Gly Thr Asn		
1700	1705	1710
Glu Asp Glu Val Met Leu Pro Ser Phe His Asp		
1715	1720	